PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 18 SEP 2001
WIPO PCT

Applicant's or agent's file reference fp12888	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. **PCT/AU00/00641**	International Filing Date *(day/month/year)* 7 June 2000	Priority Date *(day/month/year)* 8 June 1999

International Patent Classification (IPC) or national classification and IPC

Int. Cl. [7] C07K 7/50, 7/56, 7/64; A61K 38/12, 38/08, 38/16; A61P 25/28

Applicant

THE UNIVERSITY OF MELBOURNE et al

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

[X] This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of / sheet(s).

3. This report contains indications relating to the following items:

I	[X]	Basis of the report.
II	[ ]	Priority
III	[ ]	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
IV	[ ]	Lack of unity of invention
V	[X]	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
VI	[ ]	Certain documents cited
VII	[ ]	Certain defects in the international application
VIII	[ ]	Certain observations on the international application

Date of submission of the demand	Date of completion of the report
8 January 2001	6 September 2001
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer **GAVIN THOMPSON** Telephone No. (02) 6283 2240

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/AU00/00641

I. Basis of the report

1. With regard to the **elements** of the international application:*

- [ ] the international application as originally filed.
- [X] the description, pages **1 to 71** as originally filed,
  pages , filed with the demand,
  pages , received on with the letter of
- [X] the claims, pages **73 to 80** as originally filed,
  pages , as amended (together with any statement) under Article 19,
  pages , filed with the demand,
  pages **72** received on **18 July 2001** with the letter of **17 July 2001**
- [X] the drawings, pages **1/19 to 19/19** as originally filed,
  pages , filed with the demand,
  pages , received on with the letter of
- [ ] the sequence listing part of the description:
  pages , as originally filed
  pages , filed with the demand
  pages , received on with the letter of

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language which is:

- [ ] the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- [ ] the language of publication of the international application (under Rule 48.3(b)).
- [ ] the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- [ ] contained in the international application in written form.
- [ ] filed together with the international application in computer readable form.
- [ ] furnished subsequently to this Authority in written form.
- [ ] furnished subsequently to this Authority in computer readable form.
- [ ] The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- [ ] The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. [ ] The amendments have resulted in the cancellation of:
   - [ ] the description, pages
   - [ ] the claims, Nos.
   - [ ] the drawings, sheets/fig.

5. [ ] This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* *Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).*

** *Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report*

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims **1 to 52**	**YES**
	Claims	**NO**
Inventive step (IS)	Claims **1 to 52**	**YES**
	Claims	**NO**
Industrial applicability (IA)	Claims **1 to 52**	**YES**
	Claims	**NO**

2. Citations and explanations (Rule 70.7)

The limitation on the molecular weight of the BDNF mimic of claim 1 and its exclusion of compounds derived from NGF, NT-3 and NT-4/5 renders the claims novel and inventive.

Claims 41 to 46 in some contracted states to the PCT may not be considered subject matter for patents as they involve the medical treatment of human subjects.

CLAIMS:

1). A cyclic compound comprising on or more cyclic moieties, which has a biological activity of brain-derived neurotrophic factor (BDNF), and a molecular weight less than 3,000 daltons with the proviso that the compound is not derived from NGF, NT-3 or NT-4/5 or a monocyclic monomeric compound derived from loop2 of BDNF.

2). A compound according to claim 1, wherein the compound is monocyclic monomeric, bicyclic dimeric, or tricyclic dimeric.

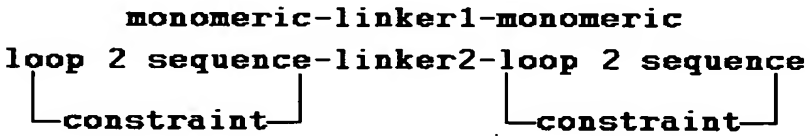
3). A compound according to claim 2, wherein the compound is a bicyclic dimeric compound of general formula (I):

(I).

4). A compound according to claim 3, wherein the constraint comprises a covalent grouping of atoms.

5). A compound according to claim 4, wherein the constraint and the linker may be the same or different.

6). A compound according to claim 2, wherein said compound is a tricyclic dimeric compound of general formula (II):



(II).

7). A compound according to claim 6, wherein each of the constraint, linker 1 and linker 2 may be th same or